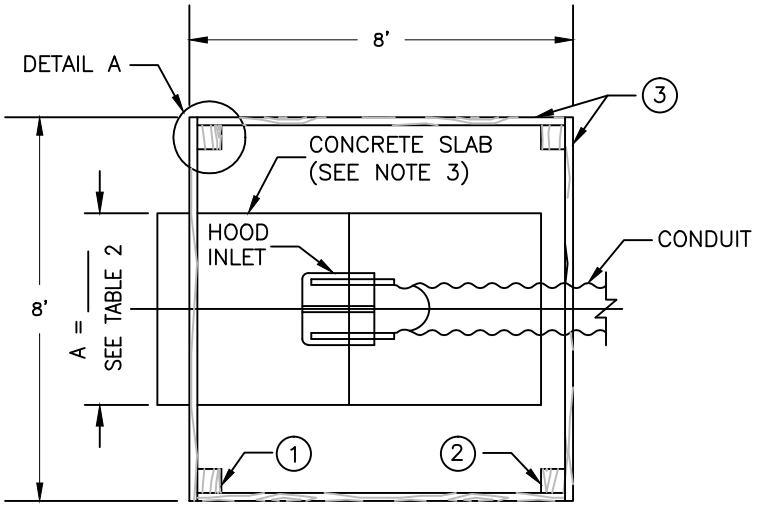
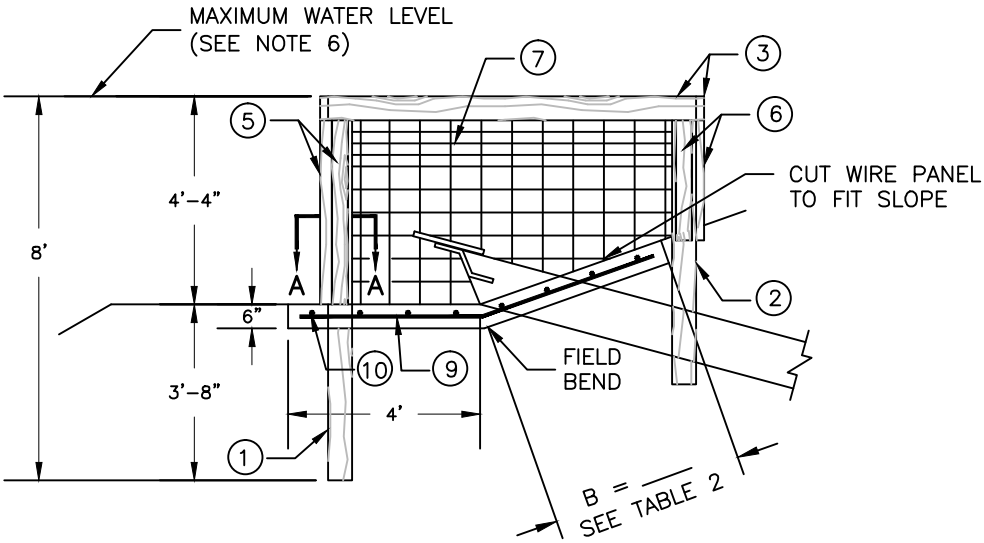
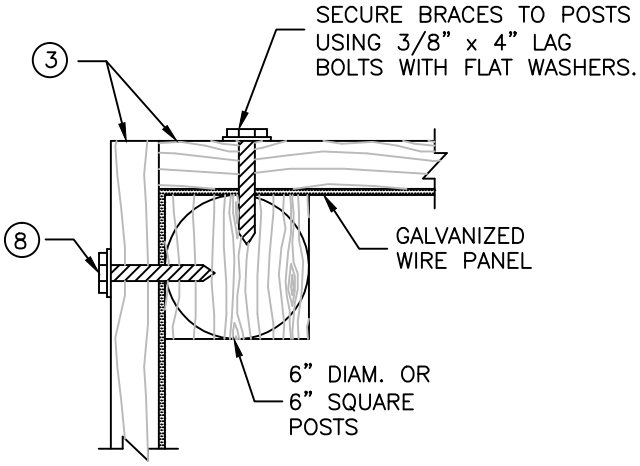


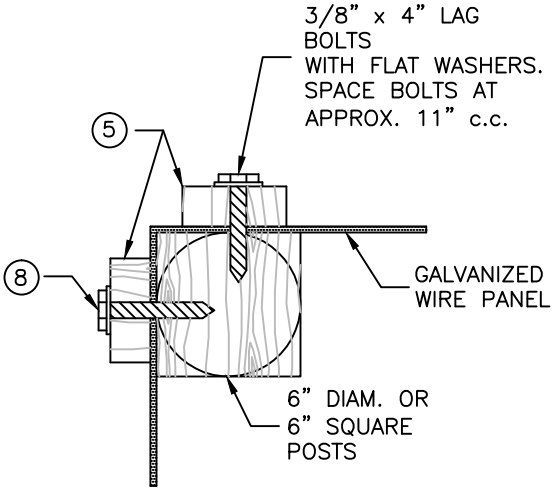

PLAN VIEW




SECTION ON CENTERLINE



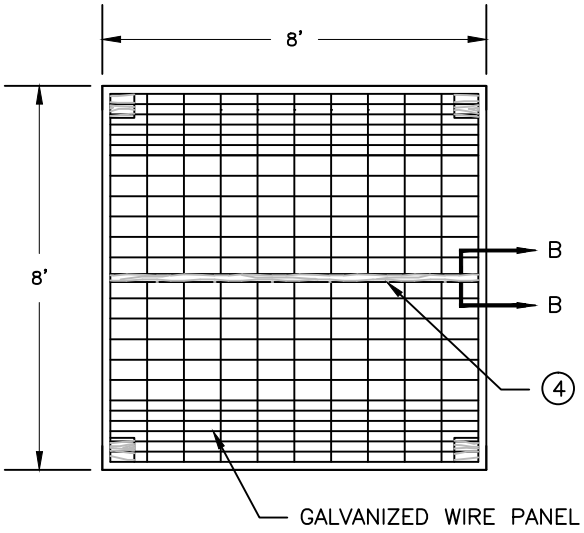

DETAIL A




SECTION A–A

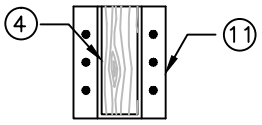


| | | | |
|---|---|---|---|
| USDA United States Department of Agriculture<br>Natural Resources Conservation Service | TRASH RACK AND PROTECTIVE FENCE FOR HOOD INLETS<br>CLIENT: _____<br>COUNTY: _____ | Date<br>Designed _____<br>Drawn _____<br>Checked _____<br>Approved _____ | File Name<br>WI–272<br>Date<br>06/15<br>Sheet of |




PLAN VIEW
OPTIONAL COVER

NOTE
THE WIRE PANEL SHALL BE FASTENED TO THE TOP OF THE TRASH RACK BRACES WITH 2" LONG GALVANIZED STAPLES 6" ON CENTER. IF ACCESS IS DESIRED TO THE RISER, THE COVER MAY BE CONSTRUCTED ON A SEPARATE FRAME WITH HINGES AND LOCKDOWN HARDWARE.




SECTION B–B

| BILL OF MATERIALS | | | |
|---|---|---|---|
| MARK | ITEM | LENGTH | QUANTITY |
| 1 | 6" DIAM. OR 6" SQUARE POSTS | 8'–0" | 2 |
| 2 | 6" DIAM. OR 6" SQUARE POSTS | 6'–0" | 2 |
| 3 | 2" x 6" BRACES | 8'–0" | 4 |
| 4 | 2" x 6" BRACE (TO FASTEN OPTIONAL WIRE PANEL COVER ON TOP) | 8'–0" | 1 |
| 5 | 2" x 4" BOARDS | 3'–10" | 4 |
| 6 | 2" x 4" BOARDS | 2'–6" | 4 |
| 7 | GALVANIZED WIRE PANEL – (4'–4" HIGH) | 16'–0" | 2 * |
| 8 | 3/8" x 4" LONG LAG BOLTS WITH FLAT WASHERS | --- | AS REQD. |
| 9 | REINFORCING STEEL (SEE TABLE 1) | --- | POUNDS |
| 10 | REINFORCING STEEL (SEE TABLE 1) | --- | POUNDS |
| 11 | GALVANIZED JOIST HANGERS (OPTIONAL COVER) | --- | 2 |
| | CONCRETE SLAB (SEE TABLE 2) | --- | CU. YDS. |
| | ROCK RIPRAP | | CU. YDS. |
| | BEDDING FOR ROCK RIPRAP | | CU. YDS. |

* ADD ONE TO THE QUANTITY FOR THE OPTIONAL COVER.

NOTES:

1. ALL WOOD SHALL BE PRESSURE TREATED.
2. INSTALL WIRE PANELS WITH CLOSE WIRE SPACING AT THE TOP AS SHOWN.
3. REINFORCEMENT IS #4 BARS SPACED AT 12" EACH WAY. CUT THE STEEL REINFORCEMENT BARS AROUND THE PIPE PROVIDING A MINIMUM 2 INCH CLEARANCE.
4. BEFORE THE CONCRETE IS PLACED, WRAP THE PIPE WITH A STRIP OF HEAVY ROOFING FELT WHERE THE CONCRETE WILL BE IN CONTACT WITH THE PIPE.
5. ROCK RIPRAP WITH BEDDING MAY BE USED AS AN OPTION TO THE CONCRETE SLAB WHEN SO SPECIFIED ON THE DRAWINGS.
6. THE MAXIMUM WATER LEVEL SHALL BE BELOW THE TOP OF THE TRASH RACK UNLESS A WIRE PANEL COVER IS PROVIDED. SEE COVER DETAILS ABOVE.

| TABLE 1 – STEEL QUANTITIES | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CONDUIT DIAMETER | MARK 9 (#4 BAR) | | | MARK 10 (#4 BAR) | | | TOTAL FEET | TOTAL POUNDS |
| | LENGTH | QUAN. | FEET | LENGTH | QUAN. | FEET | | |
| 6" | 7'–6" | 4 | 30'–0" | 3'–6" | 8 | 28'–0" | 58'–0" | 39 |
| 8" | 7'–6" | 4 | 30'–0" | 3'–6" | 8 | 28'–0" | 58'–0" | 39 |
| 10" | 7'–6" | 4 | 30'–0" | 3'–6" | 8 | 28'–0" | 58'–0" | 39 |
| 12" | 7'–6" | 4 | 30'–0" | 3'–6" | 8 | 28'–0" | 58'–0" | 39 |
| 15" | 8'–6" | 6 | 51'–0" | 5'–6" | 9 | 49'–6" | 100'–6" | 67 |
| 18" | 8'–6" | 6 | 51'–0" | 5'–6" | 9 | 49'–6" | 100'–6" | 67 |
| 21" | 9'–6" | 6 | 57'–0" | 5'–6" | 10 | 55'–0" | 112'–0" | 75 |
| 24" | 9'–6" | 6 | 57'–0" | 5'–6" | 10 | 55'–0" | 112'–0" | 75 |
| 30" | 10'–6" | 6 | 63'–0" | 5'–6" | 11 | 60'–6" | 123'–0" | 83 |
| 36" | 11'–6" | 7 | 80'–6" | 6'–6" | 12 | 78'–0" | 158'–6" | 106 |
| 42" | 12'–6" | 7 | 87'–6" | 6'–6" | 13 | 84'–6" | 172'–0" | 115 |
| 48" | 13'–6" | 7 | 94'–6" | 6'–6" | 14 | 91'–0" | 185'–6" | 124 |

| TABLE 2 – CONCRETE QUANTITIES | | | | |
|---|---|---|---|---|
| CONDUIT DIAMETER | DIMENSION A | DIMENSION B | SLAB SIZE | TOTAL CONCRETE (CU. YDS.) |
| 6" | 4' | 4' | 4' x 8' | .6 |
| 8" | 4' | 4' | 4' x 8' | .6 |
| 10" | 4' | 4' | 4' x 8' | .6 |
| 12" | 4' | 4' | 4' x 8' | .6 |
| 15" | 6' | 5' | 6' x 9' | 1.0 |
| 18" | 6' | 5' | 6' x 9' | 1.0 |
| 21" | 6' | 6' | 6' x 10' | 1.1 |
| 24" | 6' | 6' | 6' x 10' | 1.1 |
| 30" | 6' | 7' | 6' x 11' | 1.1 |
| 36" | 7' | 8' | 7' x 12' | 1.4 |
| 42" | 7' | 9' | 7' x 13' | 1.5 |
| 48" | 7' | 10' | 7' x 14' | 1.6 |